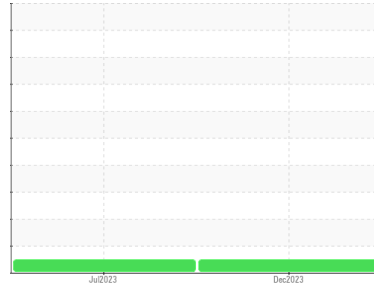


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**8609**  
 Component  
**Diesel Engine**  
 Fluid  
**CHEVRON DELO 400 SAE 10W30 (--- QTS)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>PCA0088504</b>	PCA0088536	---
Sample Date	Client Info		<b>19 Dec 2023</b>	13 Jul 2023	---
Machine Age	mls	Client Info	<b>118948</b>	77608	---
Oil Age	mls	Client Info	<b>41340</b>	0	---
Oil Changed	Client Info		<b>Changed</b>	Changed	---
Sample Status			<b>NORMAL</b>	NORMAL	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	---
Water	WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol	WC Method		<b>NEG</b>	NEG	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>44</b>	84	---
Chromium	ppm	ASTM D5185m >20	<b>2</b>	2	---
Nickel	ppm	ASTM D5185m >4	<b>0</b>	1	---
Titanium	ppm	ASTM D5185m	<b>0</b>	0	---
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >20	<b>2</b>	59	---
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	6	---
Copper	ppm	ASTM D5185m >330	<b>3</b>	140	---
Tin	ppm	ASTM D5185m >15	<b>0</b>	1	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>10</b>	21	---
Barium	ppm	ASTM D5185m	<b>0</b>	3	---
Molybdenum	ppm	ASTM D5185m	<b>53</b>	55	---
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	5	---
Magnesium	ppm	ASTM D5185m	<b>861</b>	494	---
Calcium	ppm	ASTM D5185m	<b>1012</b>	1712	---
Phosphorus	ppm	ASTM D5185m 1260	<b>867</b>	950	---
Zinc	ppm	ASTM D5185m 1400	<b>1104</b>	1194	---
Sulfur	ppm	ASTM D5185m	<b>2701</b>	2511	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>6</b>	15	---
Sodium	ppm	ASTM D5185m	<b>4</b>	3	---
Potassium	ppm	ASTM D5185m >20	<b>0</b>	123	---

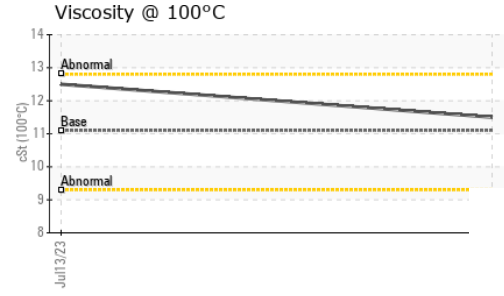
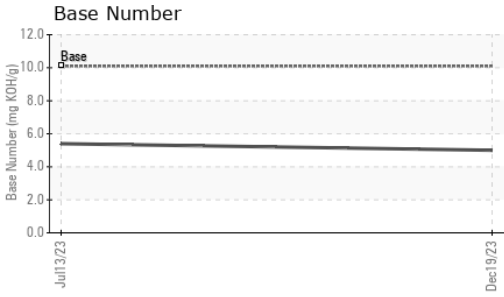
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>1.3</b>	1.8	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>12.8</b>	11.9	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>27.8</b>	26.2	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>27.3</b>	24.1	---
Base Number (BN)	mg KOH/g	ASTM D2896 10.1	<b>5.0</b>	5.4	---

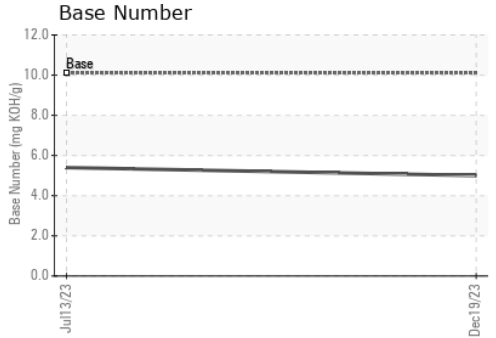
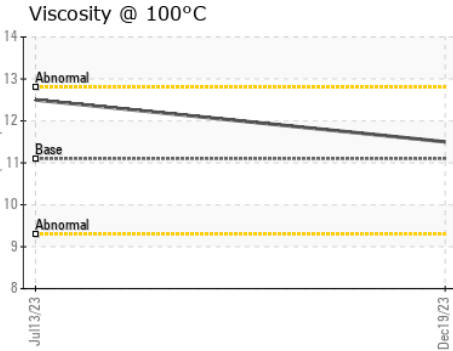
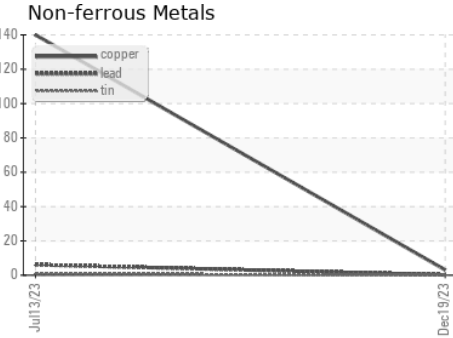
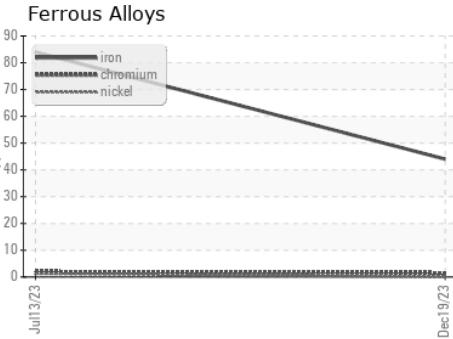
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	11.1	<b>11.5</b>	12.5	---

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0088504 **Recieved** : 16 Jan 2024  
**Lab Number** : **06060589** **Diagnosed** : 16 Jan 2024  
**Unique Number** : 10831971 **Diagnostician** : Don Baldrige  
**Test Package** : FLEET

**MIDWEST MOTOR EXPRESS**  
 2169 MUSTANG DR  
 MOUNDS VIEW, MN  
 US 55112  
 Contact: FRANK DIETZ  
 frank.dietz@mmeinc.com  
 T: (763)225-6382  
 F: x:

To discuss this sample report, contact Customer Service at 1-800-237-1369.  
 \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.  
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)